

***SIDA LITTORALIS*, A NEW NAME FOR A SPECIES OF *SIDA* SECT. *ELLIPTICIFOLIAE*
(MALVACEAE) ENDEMIC TO FLORIDA**

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ABSTRACT

Sida littoralis Siedo, **nom. nov.**, is proposed as a new name to replace *S. floridana* Siedo (not *S. floridana* Gand. [syn = *Malvastrum corchorifolium* (Desr.) Britt. ex Small]) for a species endemic to the state of Florida, USA. A key to the species of *Sida* sect. *Ellipticifoliae* is included to facilitate identification.

RESUMEN

Sida littoralis Siedo, **nom. nov.**, se propone como un nuevo nombre para reemplazar *S. floridana* Siedo (non *S. floridana* Gand. [syn = *Malvastrum corchorifolium* (Desr.) Britt. ex Small]) para una especie endémica del estado de Florida, EE.UU. Una clave para las especies del *Sida* sect. *Ellipticifoliae* se incluye para facilitar identificación.

While reviewing the current literature concerning the genus *Sida* L., a hitherto unknown publication by M. Gandoger (1924) came to the author's attention. Several new species of *Sida* were described in this short paper, including *S. floridana* Gand. Examination of the type material for this name, *S.M. Tracy 6639*, revealed that this specimen is conspecific with *Malvastrum corchorifolium* (Desr.) Britt. ex Small and that *S. floridana* Gand. does not correspond to material of the taxon named *S. floridana* Siedo. The name *S. floridana* Gand. was virtually unknown to the botanical community at the time *S. floridana* Siedo was published in 2001, in spite of the consultation of numerous literature and nomenclature references, including Fryxell (1979, 1985, 1988, 1989), IPNI (2000), Adams (1972), Long and Lakela (1971), Britton (1918), Britton and Millspaugh (1920), Clement (1953), Correll and Correll (1982), Cronquist (1980), Small (1933), Fawcett and Rendle (1926), Gooding et al. (1965), Liogier (1981), Questel (1941, 1951), and Urban (1910, 1920). The earlier date of publication of *S. floridana* Gand. renders *S. floridana* Siedo an illegitimate homonym, necessitating a new name for the taxon represented.

SIDA LITTORALIS Siedo, **nom. nov.** Replacing *Sida floridana* Siedo, **nom. illeg.**, Lundellia 4: 69. 2001, not *S. floridana* Gand., Bull. Soc. Bot. France 71: 633. 1924 [syn = *Malvastrum corchorifolium* (Desr.) Britt. ex Small]. **TYPE: USA. Florida.** Lee Co.: Middle Captiva Island, dry soil in waste places, 29 Apr 1967, *W.C. Brumbach 5819* (holotype: GH!; isotype: US!).

Erect, sparingly branched, perennial herbs 1–2 m tall. Stems greenish to brownish, sparsely and minutely stellate-pubescent to glabrescent. Laminae 5–9 cm long, 1–1.8 cm wide, 4–7 times long as wide, linear-elliptic to narrowly elliptic, sometimes weakly rhombiform, basally cuneate, apically acute; margins crenulate-serrate with teeth becoming more dense and pronounced toward apex; lower surface sparsely stellate-pubescent with primary and secondary venation prominently greenish yellow; upper surface glabrescent with sparse, minute, stellate hairs and inconspicuous venation. Petioles 4–7 mm long, sparsely stellate pubescent but relatively more so than the adjacent stem. Stipules 4–9 mm long, approximately equaling or slightly exceeding the petiole, filiform to linear in shape and often curved or twisted, margins ciliate. Flowers axillary, solitary to somewhat congested apically with up to 5 flowers clustered very near the apex of the branch. Peduncle 0.5–

0.75 mm long, unarticulated. Calyx 7–9 mm long, accrescent in fruit, longitudinally 10-costate with costae corresponding to each lobe and sinus, lobes essentially trullate with acuminate to minutely caudate apices often twisted in dextrorse or sinistrorse fashion; tricolorous, yellowish to greenish cream colored at base, green medially, and dark green at apical margin. Corolla 3–3.5 cm in diameter and pale yellow in color. Staminal column ca. 4 mm long with simple to branched translucent hairs along the column and lower portion of the filaments. Gynoecium of 9–12 filamentiferous styles emerging from the apex of the staminal column. Schizocarps 6–7 mm in diameter, apical portion emergent from calyx and purplish-black, basal portion enclosed and cream to slightly greenish, entire fruit blackening with age, apically pubescent with simple or forked antrorse hairs. Mericarps 9–12, two-awned at apex, strongly reticulated dorso-laterally on lower hemisphere; prominent purplish-black coloration on exposed apical surfaces, cream colored laterally, and cream to slightly greenish dorso-basally; apically pubescent. Seeds smooth, dark brown, puberulent apically and ventro-apically, though in poor condition on the specimens examined.

Additional specimen examined. USA. Florida. Lee Co.: Cayo Costa Island, cabbage palm-live oak forest along central E-W path, 8 Apr 1991, *S. Young & S. Herwitz 539* (USF).

As previously discussed (Siedo 2001), *Sida littoralis* is superficially similar to *Sida elliottii* Torr. & A. Gray and is distinguished by its crenulate-serrate leaves and tricolored calyx with acuminate to weakly caudate lobes terminating in a somewhat elongated apical tail often twisted in a dextrorse or sinistrorse fashion. This taxon also has a unique glabrous appearance, though it is evenly pubescent throughout. This is due to the somewhat sparse and minute nature of the fine, stellate-pubescent vestiture with hairs less than 0.1 mm long. This species has weakly rhombic leaf blades which are somewhat similar to the rhombo-elliptic laminae of *S. rubromarginata* Nash, though not as pronounced and without purplish to reddish margins. The latter is readily distinguished from *S. littoralis* by its articulated peduncle, laminae with serrate leaf margins which are purplish to reddish in color, and broadly three-nerved stipules approximately twice the length of the adjacent petiole. *Sida littoralis* flowers in April and is known exclusively from two collections on coastal islands in the Gulf of Mexico in Lee County, Florida.

ARTIFICIAL KEY TO THE SPECIES OF *SIDA* SECT. *ELLIPTICIFOLIAE*

1. Peduncles 6–20 cm long, 1.5–4 times as long as subtending leaves; seeds glabrous.
 2. Laminae linear to lance-linear; plant vestiture of short, stellate hairs less than 0.2 mm long; mericarps bluntly beaked apically, moderately to prominently reticulated dorso-laterally on lower hemisphere; western Texas and northern Coahuila ***Sida longipes*** A. Gray
 2. Laminae broadly to narrowly elliptic; plants evenly pubescent with stellate-velutinous hairs ca. 0.5 mm long; mericarps blunt apically and weakly reticulated dorso-laterally on lower hemisphere; southern Tamaulipas and central San Luis Potosí ***Sida potosina*** Brandegee
1. Peduncles 0.5–6 cm long, shorter than or only slightly exceeding subtending leaves; seeds glabrous to apically pubescent.
 3. Laminae 1–4.5 cm long, narrowly to broadly oblong or elliptic, 1.5–6 times long as wide, apically obtuse, rounded or weakly acute; mericarps blunt, rounded to two-awned apically and weakly, if at all, reticulated dorso-laterally on basal hemisphere; peduncles up to 2 cm long, not articulated.
 4. Laminae narrowly elliptic, 2–6 times long as wide, margins serrate; upper surface stellate-pubescent with simple hairs sometimes present; mericarps apically blunt to very weakly spinose, smooth to weakly reticulated dorso-laterally on lower hemisphere, awns up to 0.3 mm long; seeds glabrous to sparsely pubescent apically ***Sida linearis*** Cav.

4. Laminae elliptic to ovate, 1.5–3 times long as wide, margins dentate; upper surface glabrous to sparsely pubescent with simple hairs; mericarps apically spinose, lower hemisphere smooth, awns up to 1 mm long; seeds prominently pubescent apically with simple or forked hairs ***Sida turneroides* Standl.**
3. Laminae 2–9 cm long, linear or lance-linear to narrowly elliptic or rhombo-elliptic, 4–21 times long as wide, but if 4–7 times long as wide, leaves acuminate at apex and plants from Florida; mericarps weakly to prominently two-awned apically and dorso-laterally reticulated on lower hemisphere; peduncles 0.5–6 cm long, articulated or not.
5. Stipules 1.5–2 times the length of adjacent petiole, linear; laminae narrowly rhombo-elliptic, 4–6 times as long as wide, glabrate above; seeds pubescent apically and ventro-apically; peduncles 0.5–2(–3) cm long, 0.5–0.75 times the length of the subtending leaf, articulated ca. 0.5–1 cm below the calyx; endemic to peninsular Florida ***Sida rubromarginata* Nash**
5. Stipules 0.5 times to approximately equal the length of the adjacent petiole, falcate or subulate, not linear; laminae linear, lance-linear to narrowly elliptic, 4–21 times as long as wide, but if 4–6 times as long as wide then leaves crenulate-serrate and peduncle not articulated; seeds glabrous to apically pubescent, usually ventro-apically glabrous; peduncle 0.5–1.25 times the length of the subtending leaf but if articulated then 0.75–1.25 times the length of the subtending leaf; native to the USA, México, and Guatemala.
6. Peduncles 2–6 cm long, approximately equal or somewhat exceeding the subtending leaf, articulated 1–2 cm below the calyx with the articulation becoming most prominent on mature, fruiting peduncles; flowers strictly axillary; native to Texas and western Louisiana ***Sida lindheimeri* Engelm. & A. Gray**
6. Peduncles 0.5–4.5 cm long, shorter than the subtending leaf (rarely exceeding it in *S. elliotii*), not articulated; flowers axillary to aggregated apically; native to the southeastern USA and México.
7. Laminae margins crenulate-serrate, more densely so toward apex; lower surface venation prominently greenish yellow with venation inconspicuous on upper surface; plants sparsely, minutely stellate-pubescent to glabrescent, appearing glabrous; calyx lobes apically acuminate to weakly caudate, tricolorous, yellowish to greenish cream at base, becoming green and then darker green distally ***Sida littoralis* Siedo**
7. Laminae margins evenly serrate, venation not conspicuous; plants stellate pubescent on all surfaces, with the possible exception of upper leaf surfaces in *S. elliotii*, which are usually glabrate; calyx lobes apically acute to weakly acuminate; essentially monochrome, green at base.
8. Plants decumbent to ascending, up to 0.5 m tall, diffusely branched basally and lacking a well defined central axis; flowers drying rose colored, usually aggregated apically; calyx stellate pubescent with simple to forked villous hairs along the costae; peduncles to 2 cm long; laminae stellate pubescent above ***Sida neomexicana* A. Gray**
8. Plants erect, up to 1 m tall, few stemmed with a well defined central axis, not diffusely branched at base; flowers drying yellow, usually axillary (sometimes aggregated apically in southeastern USA populations); calyx with villous hairs present (southeastern USA and southern México to Guatemala) or absent (central to northern México and southern Florida); peduncles 0.5–4 cm long; laminae usually glabrate, sometimes stellate pubescent above (southeastern USA excluding southern Florida) ***Sida elliotii* Torr. & A. Gray**

9. Calyx stellate-pubescent, usually villous hirsute at base and along costae; flowers axillary to apically congested; laminae linear to narrowly elliptic, purplish along margins or not, glabrate to stellate and simple pubescent above; plants to 1 m tall; southeastern USA excluding southern Florida
 ***Sida elliotii* var. *elliottii***
9. Calyx stellate-pubescent, villous hairs absent; flowers axillary; laminae linear, usually purplish along margins, glabrate above; plants to 0.5 m tall; southern Florida and México ***Sida elliotii* var. *parviflora* Chapm.**

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LITERATURE CITED

- Adams, C.D. 1972. Flowering Plants of Jamaica. Univ. of West Indies, Mona, Jamaica.
- Britton, N.L. 1918. Flora of Bermuda (Illustrated). Scribner's Sons, New York.
- Britton, N.L. and C.F. Millspaugh. 1920. The Bahama Flora. Era Printing Co., New York.
- Clement, I.D. 1953. *Sida* (Malvaceae). Pp. 269–275 in B. Leon & A. Liogier (eds.), Flora de Cuba, Vol. 3. Contrib. Ocas. Mus. Hist. Nat. de La Salle, No. 13.
- Correll, D.S. and H.B. Correll. 1982. Flora of the Bahama Archipelago. Strauss & Cramer, Vaduz, Germany.
- Cronquist, A. 1980. Vascular Flora of the Southeastern United States. Univ. of North Carolina Press, Chapel Hill.
- Fawcett, W. and A.B. Rendle. 1926. *Sida* (Malvaceae). Pp. 107–120 in Flora of Jamaica, Vol. 5. Trustees of the British Museum, London.
- Fryxell, P.A. 1979. Sidus Sidarum–III. *Sida rzedowskii* sp. nov., including a preliminary discussion of the *Sida elliotii* species group. *Sida* 8: 123–127.
- Fryxell, P.A. 1985. Sidus Sidarum–V. The North and Central American species of *Sida*. *Sida* 11: 62–91.
- Fryxell, P.A. 1988. Malvaceae of México. Syst. Bot. Monographs 25.
- Fryxell, P.A. 1989. *Sida* (Malvaceae). Pp. 243–254 in R.A. Howard, Flora of the Lesser Antilles, Vol. 5. Arnold Arboretum, Jamaica Plain, Massachusetts.
- Gandoger, M. 1924. Le genre *Sida* (Malvaceae). Bull. Soc. Bot. France 71: 627–633.
- Gooding, E.G.B., A.R. Loveless, and G.R. Proctor. 1965. Flora of Barbados. Overseas Research Publication No. 7. Her Majesty's Stationary Office, London.
- International Plant Names Index (IPNI). 2000. Published on the Internet <<http://www.ipni.org>> Accessed January 2000.
- Liogier, A.H. 1981. *Sida* (Malvaceae). Pp. 109–116 in Antillean Studies I: Flora of Hispaniola, Pt. 1: Celastrales, Rhamnales, Malvales, Thymeleales, Violales. Phytologia Memoirs 3.
- Long, R.W. and O. Lakela. 1971. A Flora of Tropical Florida. Univ. of Miami Press, Coral Gables, Florida.
- Questel, A. 1941. La Flore de Saint Barthelemy (Antilles Francaise) et son Origine. Imprimerie Catholique, Basse-Terre, Guadeloupe.
- Questel, A. 1951. La Flore de la Guadeloupe et Dépendances (Antilles Francais). Imprimerie Artisanale, Moret Sur Long.

- Siedo, S.J. 1999. A taxonomic treatment of *Sida* sect. *Ellipticifoliae* (Malvaceae). *Lundellia* 2: 100–127.
- Siedo, S.J. 2001. A new species of *Sida* sect. *Ellipticifoliae* (Malvaceae). *Lundellia* 4: 69–75.
- Small, J.K. 1933. *Manual of the Southeastern Flora*. Univ. of North Carolina Press, Chapel Hill.
- Urban, I. 1910. *Flora Portoricensis*. *Symbolae Antillanae*, Vol. 4. A. Asher & Co., Amsterdam.
- Urban, I. 1920. *Flora Domingensis*. *Symbolae Antillanae*, Vol. 8. A. Asher & Co., Amsterdam.